

What is claimed is:

1. A reinforced molded article comprising:

a main portion having opposing major surfaces defining a thickness of said main portion;

a protrusion integrally molded with said main portion and protruding from one of said surfaces, said protrusion having a thickness of less than the thickness of said main portion and less than about 0.1", said protrusion having a height of at least twice the thickness of said protrusion,

said main portion and said protrusion being formed from a material comprising at least one thermoplastic, and about 2% to about 15%, by volume, reinforcing particles,

said particles each comprising one or more layers, at least 50% of said reinforcing particles being less than about 20 layers thick, at least 99% of said reinforcing particles being less than about 30 layers thick, and said layers comprising platelets having a thickness of between about 0.7 nm and 1.2 nm.

2. A reinforced molded article according to claim 1, further comprising a decorative material adhered to an opposite surface disposed on a side of said main portion opposite said one of said surfaces.

3. A reinforced molded article according to claim 2, wherein said decorative material is made from a material selected from a group consisting of vinyl, PVC/ABS, TPO, PP, and TPU.

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4. A reinforced molded article according to claim ~~2~~, wherein said decorative material is made from fabric, cloth, or carpeting.
5. A reinforced molded article according to claim ~~4~~, wherein said decorative material further includes has at least one of a bonded foam layer and a film layer disposed in contact with said opposite surface.
6. A method of producing a reinforced article comprising a main portion having opposing major surfaces defining a thickness of said main portion, a protrusion integrally molded with said main portion and protruding from one of said surfaces, said protrusion having a thickness of less than the thickness of said main portion and less than about 0.1", said protrusion having a height of at least twice the thickness of said protrusion, said method comprising:
- preparing a melt of at least one thermoplastic, and about 2% to about 15%, by volume, of reinforcing particles,
- said particles each comprising one or more layers, at least 50% of said reinforcing particles being less than about 20 layers thick, at least 99% of said reinforcing particles being less than about 30 layers thick, and said layers comprising platelets having a thickness of between about 0.7 nm and 1.2 nm;
- compressing said melt between die surfaces at a pressure of less than 3,000 PSI, said die surfaces having recesses corresponding to the shape of said protrusions,
- receiving said melt, including said 2%-15% by volume reinforcing particles, in said recesses so that said melt conforms to the shape of said recesses;
- cooling said melt, wherein cooled portions of said melt received in said recesses form said reinforced protrusions.

7. A method according to claim 6, further comprising:  
placing a decorative material between said die surfaces and contacting said melt with said decorative material so as to adhere said decorative material to said melt.
8. A method according to claim 7, wherein said decorative material contacts a surface of said die cavity opposite said surface having said recesses.
9. A method according to claim 7, wherein said decorative material is made from a material selected from a group consisting of vinyl, PVC/ABS, TPO, PP, and TPU.
10. A method according to claim 7, wherein said decorative material includes a first layer made fabric, cloth, or carpeting, and a second layer comprising at least one of a bonded foam layer and a film layer disposed in contact with said first layer, said second layer contacting said melt between said die surfaces to prevent said melt from permeating through said first layer.

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